

Qualitative exploration of a targeted school-based mindfulness course in England

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Background: Mindfulness-based training has been shown to provide benefits for adults with numerous conditions such as cancer, chronic pain, and depression. However, less is known about its impact for young people. Early adolescence (typically 10–14 years) is a time fraught with challenges such as cognitive changes, social, and academic pressures in the form of exams, all of which can provoke anxiety. While there is a lack of effectiveness studies, there is growing interest in the potential for school-based mindfulness programmes to help young people cope with the pressures of modern life. **Methods:** This study outlines a qualitative exploration of a school-based targeted mindfulness course. We interviewed 16 young people who had taken part in a 10-week mindfulness course, and held a focus group with three members of teaching staff who delivered the programme. Interviews and focus groups were analysed using applied thematic analysis. **Results:** While young people felt that they had to take part, once they started the programme they enjoyed it. Young people felt that they learned a range of coping skills, and it had a positive impact on their behaviour. However, the targeted approach of the intervention could lead to young people being stigmatised by their peers. Teaching staff could see the potential benefit of mindfulness courses in schools but felt there were some barriers to be overcome if it were to be implemented in the long term. **Conclusions:** Young people were willing to engage in mindful practice and felt it better equipped them to deal with stressful situations.

Key Practitioner Message

- The mental health and well-being of children is a current priority area for the British government.
- While there is a lack of effectiveness studies, evidence suggests that the provision of mindfulness training in schools can give young people the tools they need to deal with stressful events.
- Evidence from this study suggests that a targeted approach to delivering mindfulness training may deter recruitment as young people are concerned about being stigmatised.
- A commitment from staff delivering mindfulness to engage in mindful practice themselves is key to encouraging engagement from young people.

Keywords: Mindfulness; mental health; qualitative methods; coping; school children

Introduction

Psychological stress has been defined as a relationship between an individual and their environment with two central processes that can impact on this relationship; coping and appraisal (Lazarus & Folkman, 1984). Psychological stress can occur in any given situation where an individual feels that their psychological resources are being exceeded, which can negatively impact on well-being (Hobfoll, 2002). Early adolescence, typically defined as occurring between the ages of 10–14 (Public Health England, 2015), is a time fraught with challenges such as the onset of puberty, social, and academic pressures in the form of exams and cognitive changes, all of which can provoke anxiety (Goldstein, Boxer, & Rudolph, 2015). For most, these anxieties will be time limited. However, for some, anxiety can become

problematic and significantly impact on well-being, interrupt development, and interfere with academic progress (Thienemann, Hall, Block, & Leekman, 2015) with estimates suggesting that between 2.4% and 29.8% of people suffered some form of anxiety disorder in the previous year (Baxter, Scott, Vos, & Whiteford, 2013). Recent reports such as the UNICEF report on children's well-being in rich countries (UNICEF, 2013), and a report by the Children's Society in the United Kingdom (Layard & Dunn, 2009) have raised concerns about the emotional health and well-being of children (Coombes, Appleton, Allen, & Yerrell, 2013).

Several theories have been proposed which seek to explain stress and how individuals cope with stressful life events. The transactional model (Lazarus & Folkman, 1987) focuses on emotion-focussed coping and problem-focussed coping. Problem-focussed coping

strategies are used when individuals feel that something can be done to change their situation, effort is then directed towards finding a solution to alleviate stress. Emotion-focussed coping strategies, however, are more likely to be utilized if individuals feel that nothing can be done to change their situation and there is a need for acceptance.

Interest in mindfulness practice has grown in recent years and is fuelled by evidence that mindfulness practice can provide numerous benefits for adults suffering from conditions such as cancer (Bränström, Kvillemo, & Moskowitz, 2012; Johns et al., 2015), chronic pain (Garland and Black, 2014), anxiety disorders (Vøllestad, Sivertsen, & Nielsen, 2011), and depression (Geschwind, Peeters, Drukker, van Os, & Wichers, 2011), as well as providing benefits to otherwise healthy populations (Meiklejohn et al., 2012). In recent years there has been growing interest in the impact of mindfulness-based training for children in school settings (Huppert & Johnson, 2010).

There are currently around 12 million children residing in the United Kingdom representing 20% of the overall population (Office for National Statistics, 2013). It is important to measure children's well-being as it can help practitioners shape the services to improve future outcomes of children (Thompson & Aked, 2009).

The results of recent systematic reviews highlight that mindfulness training is acceptable to young people (Wall, 2005) and has potential for improving cognitive performance, reducing stress, and improving psychological outcomes when compared to control groups (Kuyken et al., 2013; Meiklejohn et al., 2012; Wang & Hagins, 2016; Zenner, Herrnleben-Kurz, & Walach, 2014; Zoogman, Goldberg, Hoyt, & Miller, 2015). However, there is little homogeneity between studies in terms of population, setting, and data collection with many studies underpowered making it difficult to measure the effects of mindfulness in the school setting (Zenner et al., 2014).

Given the lack of robust evidence for the impact of mindfulness interventions in school settings, it is important to explore the perceptions of those who participate in such programmes as well as those who deliver them. Previous studies have found that such programmes are seen as attractive by both pupils and teachers, and can have a positive influence on well-being, relaxation, and improved sleep (Wall, 2005). However, such studies have also highlighted potential barriers to embedding school-based mindfulness interventions. For example, when initially trialling an intervention, it may be advantageous to target it at select pupils, however, this may have a negative impact on engagement if young people feel they are missing out on other activities by instead taking part in mindfulness (Dariotis et al., 2017).

The present study was part of a larger service evaluation of mindfulness in school programmes commissioned by a local authority in England (McGeechan, Richardson, Wilson, O'Neill, & Newbury-Birch, 2016). The aim of this study was to qualitatively explore young people's experience of learning mindfulness techniques in school, and to gain feedback on the mindfulness course from teaching staff who delivered the course to young people.

Methods

Intervention

The service was specifically designed for use in the classroom as a tool to teach mindfulness techniques to children aged between 11 and 18 years of age and was adapted from the stop, breath, mindfulness intervention which has been used in adult populations. The delivery method was adapted to make it more relevant to a younger population, however, the content remained the same. The aim of the service was to improve well-being, improve concentration, and to help young people cope with the stresses of everyday life. Children followed a structured 10-week course delivered by either a teacher or teaching assistant who was a certified mindfulness practitioner, with at least 6 months of mindfulness practice, and trained to deliver the intervention. Teachers who were interested in delivering a mindfulness intervention were asked to volunteer to undergo the training.

Following an introductory session, each of the following sessions focussed on a distinct mindfulness skill. Each session lasted approximately 1 hr, and was structured with a brief presentation to the students, with visual aids and practical demonstrations that put the lesson into a context relevant to students. The nine mindfulness techniques delivered to young people are outlined in Table 1. While the intervention was designed to be universal, the schools, programme developers, and commissioners of the service decided to pilot it initially as a targeted intervention. School staff selected a group of young people from within their school, who were having issues with behaviour and low academic achievement, whom they felt would most benefit from such an intervention. Therefore, in total, 38 young people received the intervention across the three study schools.

Interviews and focus groups

A series of semistructured interviews were conducted in April 2016 with young people from three secondary schools within the local authority area. One focus group was held in May 2016 with school staff who delivered the mindfulness course to young people. Ethical approval for this study was granted by the Teesside University School of Health and Social Care Research Ethics Committee (057/15 and 150/15) and by the research governance group within the local authority.

Participants

Four schools within the local authority area had certified teaching staff delivering mindfulness courses to young people of which three agreed to participate in the evaluation, while one did not respond. Voluntary response sampling was used for this study; all young people who took part in a school-based mindfulness course at one of the three study schools between September 2014 and September 2015 were invited to take part in an interview ($N = 38$) by their mindfulness teacher who acted as a gatekeeper. Parents of potential participants were given an information sheet and an opt-out consent form, however, no one opted their child out of the study. The researcher arranged a suitable date and time to attend the school to interview those who had expressed an interest in taking part. All participants

Table 1. Overview of mindfulness sessions

Week	Lesson
1	Introduction lesson
2	Attention
3	Anchoring attention
4	Recognizing worry
5	Being here now
6	Moving mindfully
7	Stepping back
8	Befriending the difficult
9	Taking in the good
10	Putting it all together

were given an information sheet prior to participating in an interview. Young people signed an informed assent form before interviews commenced and were given a £10 cinema voucher to thank them for their time upon completion of the interview.

School-based staff at the study schools ($N = 3$) were then invited to take part in a focus group which took place in May 2015. Participants were given an information sheet and informed consent was recorded prior to the commencement of the focus group. No incentive was offered to teaching staff.

Data collection

Semistructured interviews. Participants were invited to take part in one-to-one interviews with the lead researcher (GM). A date and time was arranged for the researcher to attend each of the study schools. As no one had been opted out of the study by their parents, anyone who attended on the day the researcher was present was eligible to take part. A total of 16 young people agreed to take part in an interview, however, we were not told how many young people declined, or were not present in school, on the day of the interview.

Prior to the interview pupils were reminded that participation was voluntary and that they were free to withdraw at any time. Participants were only told about the £10 cinema voucher at the end of their interview to avoid potential coercion. Participants were asked a series of questions designed to gain feedback on what they thought about learning mindfulness techniques in the school setting. These included questions around why young people had signed up to do the course, what sort of techniques they had been learning and whether or not they felt the programme had had any impact on either their school or home life. Interviews took place in the high school setting during normal school hours.

Focus group. Teaching staff were asked to discuss what they thought about delivering a mindfulness course in a school setting. Questions focussed on how they recruited young people to the course, what they felt the benefits were for young people, whether or not they felt supported by other staff to deliver the course, and how mindfulness courses could be successfully implemented in schools in the future. The focus group took place in a community centre where teaching staff were attending a regular mindfulness practice event.

Data analysis

All interviews and the focus groups were audio recorded and transcribed verbatim before being subjected to applied thematic analysis (Braun & Clarke, 2006). Applied thematic analysis is a phenomenological approach to qualitative analysis which focuses on the individual experience of participants. Analysis begins with line by line coding of transcripts with similar codes being grouped together into themes and subthemes. An inductive approach was used when coding the transcripts as we were not coding in line with any existing theory. Each transcript was coded individually by one researcher (GM), however, themes were discussed among all authors and refined before consensus was reached on the final themes. All interviews were anonymized and pseudonyms are used in extracts below.

Results

Of the 38 young people who took part in a school-based mindfulness course during the study period, a total of 16 (42.1%) agreed to take part in an interview which lasted between 11 and 24 min (Mean = 12 min). Participant characteristics can be seen in Table 2. Three major themes emerged from the interviews with young people: enrolment and continued engagement in mindful practice; stress reduction and improved coping skills; and discussing participation with those who did not take part in the mindfulness course.

Enrolment and continued engagement in mindful practice

Enrolment and continued engagement related to how young people were first introduced to the mindfulness course within their school and how participation in the programme encouraged them to engage in sustained mindfulness practice. While participants demonstrated a lack of understanding of what mindfulness entailed, they appeared willing to give it a go. The quote below illustrates the lack of awareness of mindfulness expressed by the pupils involved in this programme:

Erm when she said it I had not a clue what it was [mindfulness], it was only the day when Samantha came over an' we like met her for the first time Pupil (P) 6

Despite the lack of information beforehand, and some hesitation on the part of pupils, most seemed to really enjoy mindfulness once they began the course, although it may have taken a few weeks for some people to appreciate it. In the quotes below young people are discussing their favourite mindfulness exercise such as finger breathing, where you run a finger from one hand up and down the fingers of your other hand, alternatively breathing in and out as you do so.

Yeah, I've been enjoying it. You learn like, you learn from it. Like, she just told you like, to like breathe in and everything, and like she was telling [us] all this with like the fingers and everything P4

It's gonna be fun, and then when I got there it was fun and some people kept saying like when I was walking home kept saying 'it was boring, I didn't really like it' but then after that at the other lessons they were like 'oh I can't wait for it' P12

However, despite the enjoyment of most pupils, an important factor which emerged from the data is that many of the young people interviewed felt like they had no choice but to take part. While they ultimately enjoyed the programme, there is a possibility that had they felt able to say no, then fewer would have participated. As schools selected young people whom they felt would benefit most from participation this raises concerns around the applicability of mindfulness training in a general school population. The quotes below illustrate that while not all young people felt like they had no choice, many felt that their participation was expected:

Erm, we weren't asked, it was just kind of, we didn't really have a choice to be fair P5

I think they said, they asked us and I said yes P7

While the programme lasted for a period of 10 weeks, pupils discussed continued engagement with

Table 2. Participant characteristics—Pupil Interviews ($N = 13$)

School	Age group	Gender				Total
		M		F		
1	13	3	100%	0	0%	3 (18.8%)
2	12	7	70%	3	30%	10 (62.4%)
3	15	3	100%	0	0%	3 (18.8%)
Total		13	81%	3	19%	16 (100%)

mindfulness practice long after the initial programme had ended. At the time of the interviews it had been 7 months since the last mindfulness session had been delivered, despite this, many continued to practice mindfulness at home for a variety of reasons.

Cause [sic] I do like the 7/11 [breathing exercise] at home P13

Sometimes I do [mindfulness at home, like when I am like mad or, like in a mood I do like 7–11 or the hand breathing and that really helps me [calm down]. P10

Stress reduction and improved coping skills

Participants expressed how mindfulness had helped them to relax and had taught them how to cope with stressful situations. Many felt that they were more focussed in class, and as a result of this they now felt that they were less likely to receive sanctions for their behaviour in class. Furthermore, a number of participants talked about the positive impact on their behaviour at home, and how they walk away from stressful situations rather than shouting or lashing out at family members:

I would sort of like argue back, or retaliate... Like obviously not retaliate with hitting, but shouting. [Now] if my brothers or sisters are frustrating me, or I have had an argument with my mum or dad or something like that, I'll just go upstairs and like listen to the rain out of my window P2

Cause like I've calmed down I think and I would do [mindfulness] like, just calmed down a lot. Since I've been doing [mindfulness] I haven't got [sent out of class] P13

It appears that taking part in the mindfulness course has a positive impact on the behaviour of young people. The coping skills developed as part of the course gave them the tools they need to cope with everyday life not only in school but also at home. Despite only lasting for 10 weeks, young people had continued to benefit from mindful practice for many months after finishing the programme.

Discussing participation with those not part of the group

An interesting theme to emerge from the data centred on the extent to which young people felt comfortable talking about their participation in the programme with other people who were not involved. Pupils spoke about the varying degrees to which they had discussed participation in the programme with their parents, or their peers within the school.

Despite a requirement of any school-based programme such as the mindfulness course to have parental consent prior to participation, not all pupils in the interviews felt that their parents knew they were taking part. While some spoke openly about how their parents had encouraged them to try the programme, others felt that had never discussed it with them.

Erm they thought it was something like useful for the future, they thought it was just like great and to do it P6

Erm I don't even know if they know about it. [I] 'If your parents did know you were doing it, what do you think they would think about it?' [P] Probable's [sic] like it was good and that cause then if I ever get angry at them they know that I can calm down. P9

Most young people who took part in the interviews discussed that their participation in the programme was not widely known within the school, as if the mindfulness course was their secret group. The reason that it was not widely discussed among their peers was that many young people felt that others simply would not care whether they were doing it or not. However, some young people did feel comfortable talking about what they were doing with some of their friends, the response to which was one of positivity and encouragement. One young person in particular discussed that his friends had been quite jealous when they heard he got out of class to take part, but felt that had they known more about the programme then their interest would have faded.

They think it was like some like, like something to, like saying I was lucky managing to get out of lessons... They were like [jealous] but they had no clue what it was about so they thought I was like getting activities... like playing games. P6

Focus group with teaching staff

All teachers who had completed their mindfulness training and completed a course within their school were invited to take part in a focus group ($N = 3$). The purpose of the focus group was to identify what worked well with the intervention, as well as possible areas for improvement in the future from the perspective of those who were delivering the programme. The focus group lasted for 53 min. Two major themes emerged from the analysis of interviews: implementation of mindfulness in schools; and maintaining the mindfulness course in the long term.

Implementation of mindfulness in schools

Implementation of mindfulness in schools relates to how teaching staff were able to initiate the programme within their schools. Teachers confirmed that the approach they had taken to trial the programme was to approach more vulnerable young people, those whom they felt would benefit most from taking part.

I identified three students that I worked with in a counselling way and I thought they would really benefit from this and asked them how they felt about doing it P2

Despite the mindfulness course being quite a structured programme with set lessons to be delivered each week, some of those delivering the programme in schools discussed altering the slides to make them more relevant to their groups. There was also a feeling that some of the slides were dated, with out of date Internet links, or that they were perhaps not always appropriately aimed at the right age group. However, while one participant was quite comfortable amending slides to suit their mindfulness group, others found it quite difficult to do so, and had to rely on their school's I.T. support as they did not want to bother the service providers.

I had to go back (School I.T.) several times because either something hadn't worked or had been omitted or there was a video that I was missing or and I just, and I got to the point where I just thought I can't keep doing this, I feel embarrassed P1

As well as amending the materials used for delivering mindfulness sessions, participants also discussed amending the format of the programme to meet the

individual needs of young people. Two participants in particular discussed how they delivered mindfulness as a one-to-one session which they felt would benefit that young person, despite the programme being designed as a group-based programme.

Eh I've done one not so much a group but we had two together and I've also used it in a one-to-one with some students. I think when you do it one-to-one then you can get through it a lot quicker P1

Yeah, works doesn't it, it works with a one-to-one I've done it. P3

Participants in the focus group were of the opinion that mindfulness has the potential to have a positive impact on the lives of their pupils, as well as themselves. While some participants talked about pupils' continued engagement in mindful practice, it was noted that perhaps the mindfulness course was not for everyone.

Some of them are coming in and saying that 'I used it this week, I did [mindfulness] you know cause I got really annoyed at home, my brother was going to, you know, and I did it'... Others you might pass in the corridor and say 'how are you know; have you been doing?' 'Eh, what? Oh no don't bother with that. Or I've forgotten that' P1

The above quotations highlight that there are a number of important factors which can help implement mindfulness courses into the school environment, as well things which could be changed to make it easier to implement. While participants felt that there was a positive impact of the mindfulness course which can have a real, lasting impact on the lives of young people it may not be relevant for everyone, and schools may initially target it at individuals whom they feel would most benefit from taking part.

Maintaining the mindfulness course in the long term

The final theme to emerge for the focus group related to maintaining the mindfulness course within schools. Discussions centred around the feasibility of this in terms of getting pupils into mindfulness classes, and school support for continuing with the mindfulness course.

Participant's discussed that the financial cost of the mindfulness course in the long-term was a significant barrier to maintaining the programme. While schools were generally supportive of trialling the mindfulness course, teaching staff discussed their feelings' that once schools had to start paying for delivering the course, there was a change in attitude among management who began looking at cheaper alternative programmes instead.

Okay let's do it and I said alright this is how much it is going to cost and (whistles) doesn't want to do it anymore (laughter) P3

The head was all for it, or principal I should call him. Erm and then when I went to see him, with my colleague after, with a proposal, because there were a number of staff who were interested erm to do some training in school for staff, he said there was no money left in the budget, so, sorry P1

However, despite some reservations from school management there was a sense that if there was sufficient evidence that the mindfulness course would be of long-term benefit to a substantial number of pupils then the school would revisit the idea of commissioning the service. The onus for gathering this evidence, however,

would have to fall to the teachers themselves who did not think they had the time to do this. Furthermore, given that schools had initially trialled the mindfulness course with a select group of pupils, it may be difficult for them to prove the benefit to a general school population. Teachers in the focus group were of the impression that schools were happy to trial interventions such as the mindful course, but it rarely went further than that.

Well this is a few months ago, but, you know and then it was, well if that's what you want come back to me with another proposal, and another plan to show me what the benefits are going to be, and how many kids it's going to impact, and how many, you know, well I haven't got around to do that yet P1

Furthermore, while participants in the focus group could see the benefits of the programme and were keen for it to be rolled out to more pupils within the school, there was a recognition that logistically this would prove quite difficult. Even though they felt that it was better for their case load to work with groups than pupils on a one-to-one basis, they were not sure that they would be able to consistently take pupils out of class to attend sessions.

If you can identify whether this five people I've just started counselling would all actually benefit from mindfulness then that is good for your caseload as well because you are seeing five people at once, so. P2

Got to find a time when you can get them all together. So, it's not easy... if I am seeing a student for a number of sessions, I would vary which lesson they come out of so they don't miss the same lesson every week. You do your best to do that whereas if you are going to do a group, you've really got to try it at the same time every week, you know it's harder then, to vary it, I think. So, it becomes a bit of, a bit of a nightmare. P1

Discussion

The results of this study replicate the findings of other research in this area, in that the teaching of mindfulness techniques in a school setting is generally acceptable to young people (Wall, 2005). However, despite a number of perceived benefits for young people there are a number of barriers which may make it difficult to roll out the programme in the long term.

Young people who were interviewed expressed their belief that they had no choice but to take part in the mindfulness course. However, despite a lack of information about the programme and feeling like they had to take part, as with other studies, those who took part enjoyed the mindfulness training (Huppert & Johnson, 2010), with a number of young people stating that they would be happy to take part in any future mindfulness courses. This was further emphasized in the teacher focus group as participants talked about working with those students who were more vulnerable and whom they felt would most benefit from taking part. However, this targeted approach to delivering the programme may have been a barrier to implementation. Young people discussed not really talking about mindfulness with their peers, and it is possible there was a fear of being stigmatised for accessing such a programme. Adopting a targeted approach and recruiting young people who had more behavioural and emotional issues than the general population makes it difficult to generalize the findings presented above. Previous studies looking at school-

based mindfulness have tended to adopt a universal delivery with the aim of reducing such stigmatisation which can arise when targeting subgroups (Kuyken et al., 2013). Adopting a universal approach in the future, with the goal of normalizing help seeking behaviour, may make it easier to embed mindfulness in the curriculum and reduce the chance of stigmatisation.

However, despite the targeted approach to mindfulness, those who took part seemed to experience a range of benefits from participation. Previous studies have shown the benefit of mindfulness-based programmes for young people in terms of academic performance, emotional regulation, and stress reduction (Meiklejohn et al., 2012; Wang & Hagins, 2016). Many of the young people involved in this study discussed that they had a history of behavioural and emotional problems. By taking part in the mindfulness course they now felt that they had an array of skills which could be used in stressful situations to help them make better choices. This has resulted in young people receiving less sanctions within school for their behaviour. Furthermore, following the mindfulness course many young people discussed using the skills they developed at home to help them deal with stressful situations.

The results of the teaching staff focus group indicated that while participants could see the benefit of mindfulness for young people, there were some potential barriers which needed to be overcome in order to roll the programme out in the long term. As with other studies, finding time and space to facilitate mindfulness within the school was seen as a potential barrier to the future of the programme (Wang & Hagins, 2016). While schools were initially supportive of the programme, logistically it would be very difficult to remove large numbers of students from lessons on a regular basis to take part unless it was added as a timetabled activity. Furthermore, schools were potentially put off by the cost of rolling out the programme on a larger scale. Participants also discussed technical issues with an inability to edit course slides, and a feeling that the materials are not appropriate for older children also acting as barriers to the long-term implementation of the programme.

Schools were potentially put off by the financial cost of committing to the mindfulness course in the long term. While school management were initially supportive of mindfulness, the teachers expressed the feeling that this support soon disappeared when the programme was no longer provided free of charge. For programmes like this to be successful full buy in from the schools needs to be ensured before the programme is rolled out otherwise it is unlikely to become embedded into the school culture.

Conclusion

In summary, the mindfulness course was generally well-received by young people in the schools, and by those who delivered the sessions. While the results of this study cannot be generalized to school children as a whole, the pupil interviews in particular have highlighted that this programme has the potential to deliver a number of benefits for school aged children.

Limitations

We have been unable to determine what the long-term impact of this programme is, or how long young people

maintain their mindful behaviour following the programme. Furthermore, due to interviews with young people taking place in school time we were limited in how long we could speak to each participant resulting in relatively short interviews. It may be beneficial to conduct interviews out of school times to more fully explore young people's experiences. In addition, a requirement of the study was that interviews not take place before a 6-month follow-up survey was conducted, the results of which are presented elsewhere (McGeechan et al., 2016). This delay may have affected young people's recall of the intervention.

A further limitation of this study was that initial coding was conducted by one researcher. While all authors were involved in the grouping of codes into final themes, and refining the themes until consensus was reached, it may have improved the validity of our findings if an independent researcher had second coded a proportion of the transcripts.

Finally, given that only 16 of 38 potential young people took part in an interview, it is possible that only those who had a positive experience of the programme were willing to share their views. While it may not be feasible, in future studies it could be beneficial to ascertain reasons why young people were not willing to be interviewed to ascertain if the views are representative of all of those who received the intervention.

While some evidence suggests that mindfulness in school programmes may be beneficial for young people there is a lack of robust effectiveness studies (Kuyken et al., 2013; Meiklejohn et al., 2012). There is, therefore, a need for a larger scale study which uses validated measures in order to determine how effective such programmes can be at increasing well-being in young people. At present there is a large-scale randomized trial being conducted in the United Kingdom looking at the impact of mindfulness in a general school population, and while the aim of this trial is to clarify the effectiveness and cost-effectiveness of school-based mindfulness interventions, it may also provide answers to some of the limitations outlined above (Wellcome Trust, 2015). However, the results of this will not be known for at least 5 years, therefore it may be necessary to continue to evaluate such courses in the short term.

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Ethical information

Ethical approval for this study was granted by the Tees-side University School of Health and Social Care Research Ethics Committee (057/15 and 150/15) and by the research governance group within the local authority.

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